

REMARKS/ARGUMENTS

The rejections presented in the Office Action dated July 23, 2007 (hereinafter Office Action) have been considered. Claims 1-62 remain pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claim 6 has been amended to correct a typographical error. Accordingly, no new matter has been added. Claim 6 is objected to for reciting “the memory” without proper antecedent basis. Claim 6 has been amended to depend from claim 3, which does provide proper antecedent basis for “the memory.” Therefore, the Applicant respectfully requests withdrawal of the objection to claim 6.

Claims 8-62 have been withdrawn by the Examiner. These claims were objected to because each respective claim status indicator did not recite that the claim was withdrawn. The Applicant has updated the status indicator for each of these claims. Therefore, the Applicant respectfully requests withdrawal of the objection to claims 8-62.

Claims 1-3 and 5-7 are rejected based on 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,318,593 to *Duggan* (hereinafter “*Duggan*”).

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (*Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. The Applicant respectfully submits that *Duggan* does not teach each and every element and limitation of independent claim 1, and therefore fails to anticipate this claim.

The Applicant’s independent claim 1 recites, among other features, a controller coupled to the lead interface, monitoring circuitry, and energy delivery circuitry, the controller transitioning operation of the device from the monitoring mode, in which the energy delivery circuitry is disabled, to the energy delivery mode, in which the energy

delivery circuitry is enabled, at least in part in response to coupling the cardiac lead to the lead interface.

Duggan discloses a pacemaker where the “output of the pacemaker comprises a plurality of latch drivers and switches, which are selectively operable to apply stimulation to the patient’s heart, as well as to sense signals indicative of the patient’s heart activity.” (Abstract). As cited on Pages 8-9 of the Office Action to support the rejection of independent claim 1, *Duggan* states that:

In a further feature of this invention, the microprocessor provides output control or timing signals to an array of select switches, each coupled to its own driver and lead. A lead may be coupled from the pacemaker to a particular portion or heart, e.g., the patient's ventricle or atrium, to some other body tissue, to a mechanical transducer to sense body activity or to a transducer within the pacemaker to sense some condition of the pacemaker, e.g., moisture. By selectively closing one of the select switches, that lead is connected, for example, to stimulate body tissue or to receive a signal indicative of a condition to be monitored. Failure of a lead may be overcome by using redundant leads; upon sensing the failure of one lead, a second lead may be connected from the pacemaker to the patient's heart to continue tissue stimulation or monitoring. (Col. 6, Lines 1-16).

The Office Action contends that Col. 6, Lines 1-16, as quoted above, teaches “a controller transitioning operation of the device from the monitoring mode, in which the energy delivery circuitry is disabled, to the energy delivery mode, in which the energy delivery circuitry is enabled, at least in part in response to coupling the cardiac lead to the lead interface.” (Office Action, Page 9). However, the Applicant respectfully submits that this interpretation is in error.

For example, the quoted portion of *Duggan* discloses selectively completing an electrical connection between a portion of a heart to stimulating circuitry via a lead, the electrical connection being selectively completed and broken using a switch controller by a microprocessor. *Duggan*'s "selectively closing one of the select switches" to electrically connect a lead assumes that the lead is already connected to the pacemaker. (Col. 6, Lines 4-13; see also Col. 11, Lines 53-64). As such, *Duggan* does not attribute any significance to connecting a lead to a lead interface.

The Applicant's independent claim 1 recites transitioning operation of the device from the monitoring mode, in which the energy delivery circuitry is disabled, to the energy delivery mode, in which the energy delivery circuitry is enabled, at least in part in response to coupling the cardiac lead to the lead interface.

Moreover, *Duggan* discloses that "control signals may be transmitted to change the mode of heart pacing." (Col. 5, Lines 24-25). *Duggan* further discloses that the mode of operation of the pacemaker can be changed by a physician bringing an external magnet close to the pacemaker. (Col. 8, Lines 13-18). As referenced on Page 8 of the Office Action, *Duggan* states that:

the [patient external] transmitter 10 may be actuated to send signals via the [patient external] lead 15 and the [patient external] coil 16, to the internally implanted pacemaker 12, whereby its mode of operation may be changed from one mode to another selected mode; thus, the physician can control the type of pacing imposed upon the patient's heart in accordance with the patient's altered condition. (Col. 7, Lines 61-68; See Fig. 1).

As such, the Applicant respectfully submits that while *Duggan* does disclose externally signaling the pacemaker to change mode of operation, *Duggan* does not disclose transitioning operation of the device from the monitoring mode, in which the energy delivery circuitry is disabled, to the energy delivery mode, in which the energy delivery

circuitry is enabled, at least in part in response to coupling the cardiac lead to the lead interface, as recited in independent claim 1.

Additionally, the Applicant notes that *Duggan's* pacemaker controls a switch to complete an electrical connection in response to an externally communicated signal, the externally communicated signal directing a change in mode of operation, as discussed above. In this way, *Duggan* discloses completing an electrical connection in response to a signaled mode change desired by a physician, but does not disclose changing operational modes in response to connecting a lead.

The Applicant's independent claim 1 recites transitioning operation of the device from the monitoring mode, in which the energy delivery circuitry is disabled, to the energy delivery mode, in which the energy delivery circuitry is enabled, at least in part in response to coupling the cardiac lead to the lead interface, which is clearly not taught by *Duggan* for each of the reasons as discussed above.

As such, the Applicant respectfully submits that *Duggan* fails to teach each and every element and limitation of independent claim 1, and therefore cannot anticipate at least this claim.

Dependent claims 2, 3, and 5-7, which are dependent from independent claim 1, were also rejected under 35 U.S.C. §102(b) as being unpatentable over *Duggan*. While the Applicant does not acquiesce to the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited reference. Therefore, dependent claims 2, 3, and 5-7 are also not anticipated by *Duggan*.

For at least these reasons, the Applicant respectfully submits that the rejection of claims 1-3 and 5-7 as being anticipated by *Duggan* is not sustainable, the withdrawal of which is respectfully requested.

Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Duggan* in view of U.S. Patent No. 6,205,357 to *Ideker et al.* (hereinafter "*Ideker*").

Claim 4 depends from independent claim 1. Independent claim 1 is not obvious for at least the reason that no proper combination of the cited references teaches or suggests each and every element and limitation recited in the claim. While the Applicant does not acquiesce to the particular rejections to this dependent claim, it is believed that this rejection is now moot in view of the remarks made in connection with independent claim 1. This dependent claim includes all of the limitations of the base claim and recites additional features which further distinguish this claim from the cited references. Moreover, if an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. (*In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Therefore, dependent claim 4 is not made obvious by *Duggan*, even in combination with *Ideker*.

As such, the Applicant respectfully requests withdrawal of the §103(a) rejection of claim 4 and notification that this claim is in condition for allowance.

It is to be understood that the Applicant does not acquiesce to the Examiner's characterization of the asserted art or the Applicant's claimed subject matter, nor of the Examiner's application of the asserted art or combinations thereof to the Applicant's claimed subject matter. Moreover, the Applicant does not acquiesce to any explicit or implicit statements or conclusions by the Examiner concerning what would have been obvious to one of ordinary skill in the art, and the like. The Applicant respectfully submits that a detailed discussion of each of the Examiner's rejections beyond that provided above is not necessary, in view of the clear absence of teaching and suggestion of various features recited in the Applicant's pending claims. The Applicant, however, reserves the right to address in detail the Examiner's characterizations, conclusions, and rejections in the future.

Additionally, the Applicant does not acquiesce to the Examiner's characterization of *Infinger* and the pending claims as discussed in section 12 of the Office Action. (Pages 6-7). Considering that the anticipation rejection based on *Infinger* has been withdrawn, the Applicant refrains from addressing the Examiner's discussion of *Infinger* for the sake of brevity.

Authorization is given to charge Deposit Account No. 50-3581 (GUID.048US01) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

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Date: October 23, 2007

By:

A handwritten signature in dark ink, appearing to read "Paul Sherburne", is written over a horizontal line.

Paul Sherburne
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